

Science and results drive fertility

SEMEX'S FERTILITY FIRST PROGRAM HAS HELPED INCREASE CONCEPTION RATES BY 5.2%

Genetics can deliver significant value to dairy producers – from healthier cows to more lactations to higher milk production – resulting in a strengthened bottom line for farms worldwide.

But to take full advantage of genetic advances, producers first have to be able to get cows pregnant, explains Christian Vigneault, Semex's Director, Embryo Operations & Services. "Semex's genomic program offers tremendous products for our customers, but we must have high fertility before producers can realize the production and profit potential we have to offer."

That philosophy is what drives Semex's Fertility First program, launched in 2018, ensuring Semex's semen products have the highest possible fertility levels. "We're a science driven and results focused organization. That's our strength and we're applying it to every dose of 200 code semen to make sure it's the best it can be," says Vigneault. "We have changed, adjusted and used both science and real results to design our Fertility First protocols."

NEW PROTOCOLS RAISE THE BAR

To ensure it delivers the highest quality semen possible, Semex took a hard look at all aspects of its business that impacts fertility – from the barn, to the lab, to the tank and to the farm gate. The first quality factor addressed was sperm concentration.

"We've adjusted our protocols, ensuring we're at or above industry standards for semen concentration. We want to be the industry's fertility leader and if that means we have to trade-off the total number of doses produced so be it," says Vigneault.

When it comes to semen quality, some bulls simply rate higher than others. Many bulls consistently deliver semen that puts them at the top for quality, while other bulls tend to hover near the middle of pack and score average for quality.

Vigneault notes that high sperm concentration can have a significant impact on sires with average quality. "In these cases, when we have a bull that is just above average, we can take additional steps to ensure quality, including adding more sperm cells to these straws. From an industry perspective our threshold was high, but we've decided to go even higher."

Semex also implemented stringent post-thaw motility

thresholds. "That means we've simply increased our quality standards," says Vigneault. "We've invested in new tools to monitor and assess semen quality after thaw, and if a batch doesn't meet the higher motility threshold, we've decided that it must go directly into the trash – there are no exceptions."

MANAGING NEW YOUNG SIRES

Traditionally, Semex has maintained an aggressive philosophy when managing new young sires, getting them to market as quickly as possible. Customers are always anxious to get access to new high Genomax™ sires, but Vigneault notes that the semen quality of younger sires often doesn't measure up to that of sires when they reach 18 or even 24 months of age.

As a result, Semex has adopted more restrictive protocols that ensures young sires meet higher quality standards before being released to customers. "We're waiting longer and ensuring that our bulls have reached a phase where they're consistently producing high quality semen," says Vigneault. "We'll use semen from young sires internally that doesn't meet these guidelines, generating the next generation of genomic bulls, but we will not sell them commercially."



THE FERTILITY FIRST PROGRAM, ALSO INCLUDES:

- Extensive reviews of our entire inventory with any product not meeting upgraded quality criteria being discarded
- Increased morphology testing
- Full review of all the standard operating procedures for both conventional and Semex™ sexed semen production
- Restricted release of semen produced from sires less than 12 months of age

It's been a lot of work, but changes are indeed delivering impressive results, says Vigneault. Overall, Semex's conception rate in 2018 increased by 5.2% over 2017.

"That's based on 600,000 matings on USA farms and we're expecting to see more positive results as we look at more data," says Vigneault. "We're really happy with the results. It's good for our clients and it's good for our business. When it comes to fertility, we're excited to be an industry leader."